

## Critical Habitat - Breeding Great Lakes Piping Plovers

	OCCUPIED HABITAT		UNOCCUPIED HABITAT	
PCE <sup>1</sup>	LAA	ADV. MOD.	LAA	ADV. MOD.
(1) sand, gravel, or cobble beaches or spits	Any activity that temporarily (during the period 1 April to 31 August or until all birds have departed from the CHU <sup>2</sup> ) or permanently reduces length, width, area, or slope of beach; <u>or</u> temporarily or permanently alters the character of the substrate or replaces the substrate.	Any activity that appreciably reduces: 1. the number of pairs that the “CH as a whole” can support; 2. the bird productivity that the “CH as a whole” can provide; 3. the ability of “CH as a whole” to maintain adult survival; or 4. the distribution of “CH as a whole”.	Any activity that temporarily (during the period of 1 April to 1 July) or permanently reduces length, width, area, or slope of beach; <u>or</u> temporarily or permanently alters the character of the substrate or replaces substrate.	Any activity that appreciably reduces: 1. the number of pairs that the “CH as a whole” can support; 2. the bird productivity that the “CH as a whole” can provide; 3. the ability of “CH as a whole” to maintain adult survival; or 4. the distribution of “CH as a whole”.
(2) shoreline length $\geq$ 0.2 km of gently sloping sand beach				
(3) sand beach area of $\geq$ 2 ha.				
(4) $\geq$ 50 m where beach width is $\geq$ 7 m or $\geq$ 7 m sand and cobble between dune and treeline				
(5) distance from waterline to treeline $\geq$ 50 m	Any activity that reduces the distance between the waterline and the treeline.	Any activity that appreciably reduces: 1. the number of pairs that the “CH as a whole” can support; 2. the bird productivity that the “CH as a whole” can provide; 3. the ability of “CH as a whole” to maintain adult survival; or 4. the distribution of “CH as a whole”.	Any activity that reduces the distance between the waterline and the treeline.	Any activity that appreciably reduces: 1. the number of pairs that the “CH as a whole” can support; 2. the bird productivity that the “CH as a whole” can provide; 3. the ability of “CH as a whole” to maintain adult survival; or 4. the distribution of “CH as a whole”.

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PCE <sup>1</sup>	LAA	ADV. MOD.	LAA	ADV. MOD.
(6) sparse vegetation with $\leq 50\%$ herbaceous or woody cover	Any activity that increases woody or herbaceous cover beyond 50% of the beach area or inter-dunal cobble pans.	Any activity that appreciably reduces: 1. the number of pairs that the “CH as a whole” can support; 2. the bird productivity that the “CH as a whole” can provide; 3. the ability of “CH as a whole” to maintain adult survival; or 4. the distribution of “CH as a whole”.	Any activity that increases woody or herbaceous cover beyond 50% of the beach area or inter-dunal cobble pans.	Any activity that appreciably reduces: 1. the number of pairs that the “CH as a whole” can support; 2. the bird productivity that the “CH as a whole” can provide; 3. the ability of “CH as a whole” to maintain adult survival; or 4. the distribution of “CH as a whole”.
(7) protective cover - small herbaceous patches, cobble, gravel, or debris (driftwood, wrack, root masses, dead shrubs)	Any activity that appreciably reduces protective cover either temporarily (during the period 1 April to 31 August or until all birds have departed from the CHU) or permanently.	Any activity that appreciably reduces: 1. the number of pairs that the “CH as a whole” can support; 2. the bird productivity that the “CH as a whole” can provide; 3. the ability of “CH as a whole” to maintain adult survival; or 4. the distribution of “CH as a whole”.	Any activity that appreciably reduces protective cover either temporarily (during the period of 1 April to 1 July) or permanently .	Any activity that appreciably reduces: 1. the number of pairs that the “CH as a whole” can support; 2. the bird productivity that the “CH as a whole” can provide; 3. the ability of “CH as a whole” to maintain adult survival; or 4. the distribution of “CH as a whole”.
(8) potential for the dynamic ecological processes that create and maintain habitat (e.g., erosion, accretion, plant succession, lake-level fluctuations; episodic storm events	Any activity that alters natural habitat formation & maintenance processes.	Any activity that appreciably reduces: 1. the number of pairs that the “CH as a whole” can support; 2. the bird productivity that the “CH as a whole” can provide; 3. the ability of “CH as a whole” to maintain adult survival; or 4. the distribution of “CH as a whole”.	Any activity that alters natural habitat formation & maintenance processes.	Any activity that appreciably reduces: 1. the number of pairs that the “CH as a whole” can support; 2. the bird productivity that the “CH as a whole” can provide; 3. the ability of “CH as a whole” to maintain adult survival; or 4. the distribution of “CH as a whole”.

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PCE <sup>1</sup>	LAA	ADV. MOD.	LAA	ADV. MOD.
(9) low level of disturbance from human activities or domestic animals	Violation of any of the pertinent “low disturbance” factors <sup>3</sup> from 1 April to 31 August or until all birds have departed from the CHU.	Any activity that appreciably reduces: 1. the number of pairs that the “CH as a whole” can support; 2. the bird productivity that the “CH as a whole” can provide; 3. the ability of “CH as a whole” to maintain adult survival; or 4. the distribution of “CH as a whole”.	Violation of any of the pertinent “low disturbance” factors from 1 April to 1 July.	Any activity that appreciably reduces: 1. the number of pairs that the “CH as a whole” can support; 2. the bird productivity that the “CH as a whole” can provide; 3. the ability of “CH as a whole” to maintain adult survival; or 4. the distribution of “CH as a whole”.  PCEs 1- 5 must be present as birds will not occupy sites without these PCEs.

1. PCEs are as described in the Federal Register (66FR 88:22938-22969).

2. CHU=Critical Habitat Unit.

3. See guidance, Page 2 for “low disturbance” factors.